

Elicitation of Unstated Needs

– Training Session 02 (KJ Interviewing)

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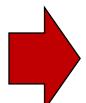
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VA KJ Training Sessions Roadmap

Session 1 – Introduce the KJ Method and describe the SEI’s approach for using this method in a virtual (non face-to-face), distributed setting.

 **Session 2** – Explain and practice KJ interviewing techniques, ensuring participants understand the critical importance of capturing context information regarding good and bad extremes of experience.

Session 3 – Explain KJ affinitzation technique and provide examples. Practice affinitzation of KJ statements that were developed from the interview data in Session 2.

Session 4 – Reaffirm unstated requirements from Session 3 results and facilitate group identification of innovative solutions to one or more unstated requirements. Explain and conduct Kano analysis exercise.



Overview of SEI Approach



Step 1: Evaluate existing knowledge of stated needs and requirements



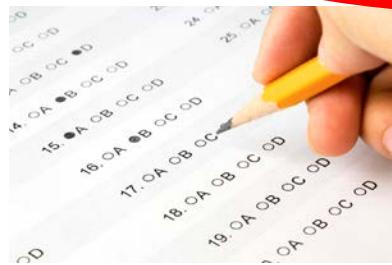
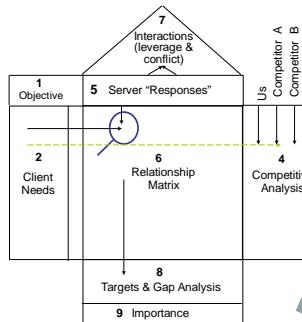
Step 2: Design the open-ended, probing questions to be used in KJ interviews



Step 3: Conduct KJ interviews collecting all possible context information



Step 4: Analyze raw output of interviews to form context need / activity statements



Step 8: Use AHP weighting and QFD matrix to determine quality and performance measures of delighters



Step 7: Conduct Kano analysis to determine must-be's vs. satisfiers vs. delighters



Step 6: Identify Unstated Needs and subsequent Innovative Requirements

Step 5: Conduct the KJ Workshop including specialized affinity exercise



Introductions and Logistics

SEI Introductions

If you would like to ask a question during the training:

- We will pause periodically for questions.
- **Please identify yourself when asking a question.**

There are two exercises in this session.

- Exercise 1 will be conducted as a class exercise.
- Exercise 2 will be conducted with breakout groups.

This session is over at the completion of Exercise 2.



Traditional User Interviewing Approach

Selected customers/users are interviewed either individually or in group settings.

Discussions center initially on areas of dissatisfaction.

Interviewing questions and discussion then migrate to solutions that might help.

Both interviewers and customers/users provide ideas for improvement.

Discussion may proceed into details of design and implementation.

Side benefits of these interviews include the following:

1. Interviewers are able to test out their own solution ideas.
2. Customers/users are able to put their recommended solutions on the table.
3. Customers/users feel better after “venting” about their dissatisfaction.



KJ Interviewing Approach

Selected customers/users are interviewed either individually or in group settings.

Questions and discussion focus on two extremes: **very dissatisfied or very happy.**

Additional open-ended, probing questions are used to collect **maximum context information** surrounding the extremely negative and positive experiences.

It is impossible to know in advance which drivers will prove actionable until we've identified drivers from all interviews. Therefore it is important in each interview to carefully probe the context of an experience to collect **sufficient information** by which relevant and reasonable **themes of experience** can later be constructed.

Copious note-taking of the context information is mandatory in these interviews.

The interviews absolutely do not touch on the solution space.

This is a challenging approach to interviewing customers/users.

To the untrained observer, the interview may seem to be a mere “complaint” exercise!





Approaches to Interview Questions

Three generic avenues of discussion may be used to start conversations, then probe and follow intuition to learn in real time.

Experience

Gaps in past performance often have clues about future value.

“Why was this a problem ...?”

“What went very well?”

Current Practice

How they “do” things can reveal compensatory behavior, waste, etc. – also sources of future potential value.

“How do you ...?”

Future Trends

Where they see things going may hold clues about future value, and tips about robust design or “future-proofing” a solution.

“Looking ahead...?”





Gathering Better Data

Sharpening interview and discussion skills



A surface dialogue reveals

- Stated needs and facts
 - complaints
 - problems
 - valued features
 - constraints

Refined data gathering and probing can reveal...

Why When Where
Who How



- What's it like in the environment? (context data)

- Use-Scenarios
- Observations
- Process Maps

- Underlying functionality (needs data)

“What does that **do** for you?”
“How and why is it important?”



Understanding Context and Needs Data



	Needs Data	Context Data
Definition	Statements about what is needed (solution free)	Scenarios that describe what it's like in the environment
Examples	<p><i>"We need to get materials in and finished goods out of our warehouse much more quickly than we do now."</i></p> <p><i>"We need to better monitor contract compliance."</i></p> <p><i>"We need to get data into the system...then out to the right people faster and more accurately."</i></p>	<p><i>"There seems to be a lot of turnover in the shipping department, which means we're constantly training new people."</i></p> <p><i>"Members will increasingly contract directly with medical groups."</i></p> <p><i>"Our biggest challenge is overly complex HMO contracts."</i></p>
How it is helpful	Specifies functionality that would be valuable	Provides clues and facts about latent requirements and operating conditions
How we use it	Capture must-be's and satisfiers	Develop delighters to inform robust design



Gathering Better Data

Interview and Discussion Skills



SIX SIGMA ADVANTAGE
The Third Wave™

Passive Listening

- body language, eye contact

Active Listening

- paraphrasing content “So, you’re saying that ...”
- tracking with emotion “That had to be frustrating.”

Probing

The right follow-up questions

- moving from opinion and emotion to underlying facts
- from their “solutions” to the underlying needs
- getting to **why** they said that (context)



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Gathering Better Data

Probing



Language **as we find it** often is the least usable – it may contain...

Probing

“Can you give me an example?”

“How did that happen?”

“Why do you say that?”

Emotion

“I hate the keyboard mouse.”

better

Judgment

“This thing stinks when relying on battery power”

better

Inference

“I need to have to have my system restore disk set with me on the road.”

better

Unclear

“We have a lot of new people that need to come up to speed on laptops soon.”

better

“While I’m typing, my thumb accidentally brushes the mouse sensor, throwing my cursor into limbo. This is even worse when I’m working in a tight place”

“There’s a ‘remaining power’ indicator that moves real slow from full to about quarter – then it quickly dives to ‘low power’ warnings and shuts down before you have a chance to respond.”

“I can’t take any chance of losing my system during long Asia trips. I need to be able to restore the OS quickly from any location”

“We have 40 new account reps that need to be able to create and manage customer orders and deliveries on their laptops by the start of next quarter.”

Language **as we need it**, scrubbed to “report language”



Example Generic KJ Interview Questions

1. What were some of your most negative experiences in the past regarding...?
2. What were some of your most positive experiences in the past regarding...?
3. What do you wish you could also do when performing...?
4. Who else would you like to be able to interact with when performing...?
5. How do you feel when something specific such as ... occurs?
6. How do others around you feel about...?
7. How could you be more effective? productive? efficient?
8. In what ways would you be happier or more fulfilled in performing...?
9. What increases your stress or frustration in performing...?
10. When and where do you use?

(All of these questions would be followed by probing questions of context surrounding the experience! Alternatively, keep asking why?)



Example: Next Generation Laptop

A company wants to design the next generation laptop for use in the home and wants to ensure the product is compelling!

- Our goal is to gather information that will help to develop requirements that will have both stated and unstated needs.

Separate from business users of laptops, home users possess unique needs and interests.

In the upcoming exercises you will develop an interview script and then conduct a KJ interview to elicit contextual details of circumstances (good and bad) that you can recount from using your laptop at home.

The resulting context information will be used by the manufacturer in subsequent KJ steps to identify themes of experience and candidate solutions.



Actor ID Table



Who (users, other systems,) would interact with the system being considered? What roles do they play? What is important to them?

Actor	Role/Profile	Critical to Quality
Business user	Road Warrior <ul style="list-style-type: none">• long plane flights• presentations• carrying sensitive files	<ul style="list-style-type: none">• Conserving battery power• Display clarity• Security
Video/audio media professional	Works creatively, collaborating, sharing files Capturing sound and visual information	Digital bandwidth (audio and video) CPU and memory speed

Some things are known at the outset; others we need to *learn*.





RE Learning Objectives: What Does the Team Need to Learn?

Actor	RE Learning Objectives
Business user	<p><u>CONTEXTUAL INFORMATION OF EXPERIENCE SURROUNDING:</u></p> <ul style="list-style-type: none">• How do they tailor their use of peripherals?• What are their most important demands on battery power?• How involved do they want to be in power conservation options?
Video/audio media professional	<p><u>CONTEXTUAL INFORMATION OF EXPERIENCE SURROUNDING:</u></p> <ul style="list-style-type: none">• What kinds of data streams do they need to capture? At what rates?• Which current and emerging IO standards are important (e.g., firewire, wireless)?



Exercise 1 – Developing an Interview Script

Task

As a group, we will quickly augment an interview guidance script that elicits general product or service capabilities for the home laptop. Refer to the training materials for guidance.

- develop initial open-ended questions (slide 13)
- develop follow-on questions to probe for context information (slides 8-12)

Duration

10 minutes

Expected Outcome

An interview script to use in the next exercise



Exercise 1 Sample Interview Script - EXAMPLES

1. What do you hate/dislike when you are using a laptop at home?
 - Please elaborate further about how you felt.
 - What was the impact?
 - How often does this happen?
2. What do you like best about using a laptop at home?
 - Please provide more detail about this experience.
 - Please describe other examples.
 - Why is this so good?
3. What other things do you want to be able to do with laptop at home?
 - Why is this important to you?
 - When would you use this?
 - How often?



Exercise 1 Interview Script – Your Turn

Modify each question for the home laptop user. Add probing questions that will allow you to capture needs and context data. (Avoid questions that can be answered yes/no.)

1. When and where do you use?

-
-
-

2. How do others around you feel about...?

-
-
-

3. How could you be more effective? productive? efficient?

-
-
-



Exercise 2 – Conducting the Interview–1

Objective

Find out what you can about stated and latent requirements for a next generation laptop for the **Home User** that

- attracts new customers
- leverages existing customer loyalty when buying new computers
- removes risks and operational problems related to maintenance and costs

Duration

45 minutes

Expected Outcome

Interview Notes. Each participant is expected to take notes.

Please email your notes to the SEI team member in your group.

Email addresses are listed on the last slide of this presentation.



Exercise 2 – Conducting the Interview–2

SEI will assign groups. Each group will be doing the same exercise. Separate telecon numbers will be used.

For each group:

- Identify at least 2 members to role play the home user of a laptop (interviewees).
- Identify a lead interviewer with all remaining participants acting as note takers and follow-up interviewers.
Remember to use your script from the last exercise.
- SEI team member will interrupt as necessary to ensure questioning stays on track.
- When finished, other team members may volunteer contextual experiences.
- Send your notes to SEI team member. Identify volunteers to participate in developing KJ statements exercise.



Developing KJ Statements

After this Session

- The SEI team member will consolidate the interview notes.
- When completed, the SEI team member will send them to the volunteers from the group for review.
- For each group, a one-hour teleconference will be scheduled with the volunteers from that group, to look at the interview notes and to distill a set of unique KJ report statements of contextual experience.

The KJ report statements from all of the groups will be shared during Session 3.



Questions?



Thank You for Your Attention!

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